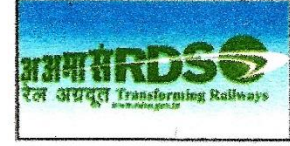




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TM/HM/DGS/Pt.III

Date: 05-03-2020

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III-	प्रधानाचार्य भा.रे.रे.प.म.प्र.के. पीपल गांव इलाहाबाद-211011	Principal, IRTMTC, Pipal Gaon, Allahabad-211011
Details of addresses are overleaf.		

विषय: डायनेमिक ट्रैक स्टेबलाइजर मशीन (डी०जी०एस-62 एन) की अनुरक्षण अनुसूची पुस्तिका का संशोधन -1.

Sub: Revision-1 of Maintenance schedule manual of Dynamic Track Stabilizer (DGS- 62N).

संदर्भ : इस कार्यालय का पत्र सं टीएम/एच एम/15 पार्ट दि. 31.08.2005

Ref: This office letter no.TM/HM/15 Pt dated-31/08/2005

डायनेमिक ट्रैक स्टेबलाइजर मशीन (डी०जी०एस-62 एन) की अनुरक्षण अनुसूची पुस्तिका (टीएम-रिपोर्ट-90), जिसे उपरोक्त संदर्भित पत्र द्वारा जारी किया गया था, का संशोधन -1 तैयार किया गया है। जिसकी प्रति, आपके सूचनार्थ तथा मशीन के कर्मचारियों जो फील्ड में काम कर रहे हैं, के मार्गदर्शन हेतु संलग्न है। यद्यपि उपरोक्त संशोधन बनाते समय सभी सावधानियाँ बरती गई हैं, फिर भी यदि कोई त्रुटि हो तो, कृपया अपने सुझावों/ टिप्पणियों को सुधार हेतु ई-मेल/ फैक्स/पत्राचार द्वारा अद्योहस्ताक्षरी को भेजे।

Revision-1 of Maintenance schedule manual of Dynamic Track Stabilizer (DGS- 62N) (TM Report-90) issued vide above reference, has been prepared. A copy of the same is enclosed herewith for your information and guidance of the machine staff working in the field. However, every care has been taken during revision of the above said list, the discrepancy noticed, if any, may be brought to the knowledge of the undersigned for further improvement, by email/fax/post.

Email id - hmtmrdso@gmail.com

संलग्नक : यथोपरि।

DA: As above


5.3.2020

(ओम प्रकाश)

निदेशक रेलपथ मशीन-III

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**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS**

**MAINTENANCE SCHEDULE MANUAL
FOR
DYNAMIC TRACK STABILISER**



(DGS – 62N)

**REPORT NO. TM –90
(Revision-01 of 2020)**

February-2020

**RESEARCH DESIGNS AND STANDARDS ORGANISATION
LUCKNOW-226011**

PREFACE

Maintenance of On-Track Machines is a challenging task. Maintenance of these machines is being done by Zonal Railways with the assistance of local trade available, Zonal Track Machine Workshops, CPOH / Allahabad and RDSO / Lucknow. With experience over the years, the railway engineers have developed adequate expertise in the maintenance of these machines. However, in absence of approved maintenance instructions, different maintenance practices have come into vogue. Therefore, it has become imperative to have a uniform maintenance standard throughout the Indian Railways.

This Revision-01 of Maintenance Schedule Manual of Dynamic Track Stabilizer (DGS 62N) has been prepared on the basis of Maintenance instruction given by OEM and suggestions received from different railways. The suggestion and feedback from field has been taken and incorporated in this maintenance schedules. Suggestion/instruction given by OEM time to time also followed in addition to this manual. The manual is prepared for those items which is required day to day maintenance. Apart from these instruction if any part of machine fails/breakdown that shall be attended immediately by the railway. The oiling and greasing shall be done of every moving part where as required in addition to manual depending on discretion of machine in charge. Some time machine modified/alterd on the basis of experience or OEM suggestion that shall be also undertaken in the maintenance practice.

While every care has been taken to make the maintenance schedules quite exhaustive, there is always scope for further improvement. Suggestions from the railways in this regard will be welcome and may be sent to the undersigned for future improvement.

(Om Prakash)
Director/Track Machine-III
RDSO/Lucknow-226011.

February-2020

EXPLANATORY NOTES

While preparing the text of Revision-1 of Maintenance Schedule Manual of Dynamic Track Stabilizer (DGS 62N) the terms used and their meanings are explained below:

CHECK - Ensure a specific condition does or does not exist.

INSPECT - Look for damage and defects including breakage, distortion cracks, corrosion and wear, check for leaks, security and that all items are completed.

CHANGE - Fit new or overhauled or reconditioned part in place of old parts and missing parts.

OVERHAUL - Dismantle, examine, recondition or renew parts as necessary against given specifications, reassemble, inspect and test.

Maintenance Schedule for Dynamic Track Stabilizer **(DGS 62N)**

S. N	Schedule	Periodicity	Duration	Location
1.	Schedule I	Daily/ before working and running	One hour	In the track Machine siding
2.	Schedule II	50 Engine hrs.	Two hrs.	-do-
3.	Schedule III	100 Engine hrs.	One day	-do-
4.	Schedule IV	200 Engine hrs.	Two days	-do-
5.	Schedule V	1000 Engine hrs.	7 days	In Satellite Depot/Zonal Workshop
6.	Schedule VI	2000 Engine hrs.	15 days	In Zonal Workshop
7.	Schedule VII	8000/6000 Engine hrs.	1st POH-45 days, 2nd POH-60 days	CPOH Workshop

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S.N.	DESCRIPTION	PAGE NO.
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SR.NO.	ITEM	SCH.I Daily	SCH.II 50 HRS.	SCH.III 100 HRS.	SCH.IV 200 HRS.	SCH.V 1000 HRS.	SCH.VI 2000 HRS.	SCH.VII 8000/6000 HRS.
1.	Engine (KTA-1150, Make- Cummins)							
1.1.	Check lube oil level and top up, if required.	√	X	X	X	X	X	X
1.2.	Check HSD oil level and top up if required.	√	X	X	X	X	X	X
1.3.	Check & adjust tension of all V-belts.	√	X	X	X	X	X	X
1.4.	Check the vacuum indicators for dry type air filters and do the needful.	√	X	X	X	X	X	X
1.5.	Clean engine and its premises.	√	X	X	X	X	X	X
1.6.	Check coolant level of radiator and top up if required.	√	X	X	X	X	X	X
1.7.	Check coolant and oil leakage if any and do the needful.	√	X	X	X	X	X	X
1.8.	Drain air tank and water separator.	√	X	X	X	X	X	X
1.9.	Check for any fuel leakage from the pump, injectors, fuel supply pipes, filters and do the needful.	√	X	X	X	X	X	X
1.10.	Check all monitoring gauges for proper functioning.	√	X	X	X	X	X	X
1.11.	Check engine oil pressure at idle speed.	√	X	X	X	X	X	X
1.12.	Check engine oil pressure at On load after two hrs. Working.	√	X	X	X	X	X	X
1.13.	Record the maximum engine temperature of the day.	√	X	X	X	X	X	X
1.14.	Check working of flasher lights.	√	X	X	X	X	X	X
1.15.	Check battery charging system.	√	X	X	X	X	X	X
1.16.	Drain water/sediments etc. from drain plug of HSD oil tank	X	√	X	X	X	X	X
1.17.	Clean battery terminal connections and apply petroleum jelly.	X	√	X	X	X	X	X
1.18.	Check electrolyte level in batteries and its specific gravity.	X	√	X	X	X	X	X
1.19.	Check the condition of V-belts and do the needful	X	√	X	X	X	X	X
1.20.	Clean outer element of dry type air cleaner or change if required.	X	√	X	X	X	X	X
1.21.	Clean engine thoroughly.	X	X	√	X	X	X	X
1.22.	Clean radiator fins by blowing air from opposite direction.	X	X	√	X	X	X	X
1.23.	Clean alternators and check connections.	X	X	√	X	X	X	X
1.24.	Change engine oil.	X	X	√*	X	X	X	X
1.25.	Change engine oil filter.	X	X	√*	X	X	X	X
1.26.	Change HSD oil filter.	X	X	√*	X	X	X	X
1.27.	Change super by pass filter.	X	X	√*	X	X	X	X
*to be done after 300 engine hours								

SR.NO.	ITEM	SCH.I Daily	SCH.II 50 HRS.	SCH.III 100 HRS.	SCH.IV 200 HRS.	SCH.V 1000 HRS.	SCH.VI 2000 HRS.	SCH.VII 8000/6000 HRS.
1.28.	Check PH value of radiator coolant.	X	X	√*	X	X	X	X
1.29.	Clean the crank case breather.	X	X	√*	X	X	X	X
1.30.	Check inlet manifolds, turbocharger hoses and air hoses for any leakage and do the needful.	X	X	X	√	X	X	X
1.31.	Replace the air cleaner element (outer and inner).	X	X	X	X	√	X	X
1.32.	Top overhaul the engine on condition basis.	X	X	X	X	√	X	X
1.33.	Check tappet clearance and adjust if required.	X	X	X	X	√	X	X
1.34.	Overhaul self-starter, if required.	X	X	X	X	√	X	X
1.35.	Overhaul the alternator, if required.	X	X	X	X	√	X	X
1.36.	Check and clean air reservoir.	X	X	X	X	√	X	X
1.37.	Check the air compressor. Overhaul if necessary.	X	X	X	X	√	X	X
1.38.	Replace the all V-belts on condition basis.	X	X	X	X	√	X	X
1.39.	Clean turbocharger and check for end and radial play.	X	X	X	X	√	X	X
1.40.	Check functioning of engine safety circuit.	X	X	X	X	√	X	X
1.41.	Change batteries, if required.	X	X	X	X	√	X	X
1.42.	Check exhaust manifold, pipes and silencer for any leakage.	X	X	X	X	√	X	X
1.43.	Calibrate fuel injection pump and injectors.	X	X	X	X	√	X	X
1.44.	Clean diesel tank.	X	X	X	X	√	X	X
1.45.	Clean cooling coil and check the fittings.	X	X	X	X	√	X	X
1.46.	Overhaul the air compressor on condition basis.	X	X	X	X	X	√	X
1.47.	Clean the crank case breather and replace on condition basis.	X	X	X	X	X	√	X
1.48.	Replace engine wiring with temperature proof wires.	X	X	X	X	X	√	X
1.49.	Overhaul the radiator.	X	X	X	X	X	√	X
1.50.	Overhaul or replace the engine on condition basis.	X	X	X	X	X	X	√
1.51.	Overhaul the fuel injection pump.	X	X	X	X	X	X	√
1.52.	Overhaul the fuel injectors	X	X	X	X	X	X	√
1.53.	Overhaul the air compressor.	X	X	X	X	X	X	√
1.54.	Overhaul the self-starter.	X	X	X	X	X	X	√
1.55.	Overhaul the alternators.	X	X	X	X	X	X	√
1.56.	Change anti-vibration mounting pads of the engine.	X	X	X	X	X	X	√
1.57.	Clean diesel tank.	X	X	X	X	X	X	√
*to be done after 300 engine hours.								

SR.NO.	ITEM	SCH.I Daily	SCH.II 50 HRS.	SCH.III 100 HRS.	SCH.IV 200 HRS.	SCH.V 1000 HRS.	SCH.VI 2000 HRS.	SCH.VII 8000/6000 HRS.
1.58.	Overhaul turbo charger.	X	X	X	X	X	X	√
1.59.	Change all the high pressure fuel pipes, pipe clamps, flexible fuel hoses and rubber hoses.	X	X	X	X	X	X	√
1.60.	Change the shutdown valve.	X	X	X	X	X	X	√
1.61.	Check engine safety system and do the needful.	X	X	X	X	X	X	√
1.62.	Change all engine filters along with lube oil.	X	X	X	X	X	X	√
1.63.	Replace cooling coil on condition basis.	X	X	X	X	X	X	√
1.64.	Replace air unloader on condition basis.	X	X	X	X	X	X	√
1.65.	Replace water separator on condition basis.	X	X	X	X	X	X	√
1.66.	Test air tank for rated pressure.	X	X	X	X	X	X	√
2.	POWER TRANSMISSION AND GEAR BOX							
2.1.	Check tightness of cardon shaft bolts.	√	X	X	X	X	X	X
2.2.	Check leakage from all gear boxes and do the needful	√	X	X	X	X	X	X
2.3.	Check and top up oil of axle gear box, Drive intermediate shaft, ZF gear box, distribution gear box and vibration gear box.	X	√	X	√	√	√	√
2.4.	Lubricate both axle guides/Stabilizing unit rollers with grease.	X	√	X	√	√	√	√
2.5.	Grease the vibration motor to vibration units couplings.	X	√	X	√	√	√	√
2.6.	Clean and oiling of work drive axle motor.	X	√	X	√	√	√	√
2.7.	Grease all cardon shafts.	X	X	√	X	X	X	X
2.8.	Replace the oil of ZF-gear box.	X	X	√**	X	X	X	X
2.9.	Replace the oil filter of ZF-gear box.	X	X	√**	X	X	X	X
2.10.	Change oil of distributor gear box.	X	X	√**	X	X	X	X
2.11.	Change oil of axle gear box.	X	X	√**	X	X	X	X
2.12.	Change the oil of drive intermediate shaft.	X	X	√**	X	X	X	X
2.13.	Change the oil of vibration gear box	X	X	√**	X	X	X	X
2.14.	Check meggy flexi washer of axle gear box and torque plate suspension rubber spring for damage. Replace if required.	X	X	X	X	√	X	X
2.15.	Check the axle bearing and grease them, change if required.	X	X	X	X	X	X	√
**to be done after 500 engine hours								

SR.NO.	ITEM	SCH.I Daily	SCH.II 50 HRS.	SCH.III 100 HRS.	SCH.IV 200 HRS.	SCH.V 1000 HRS.	SCH.VI 2000 HRS.	SCH.VII 8000/6000 HRS.
2.16.	Change mounting pad of all gear boxes.	X	X	X	X	X	X	√
2.17.	Overhaul all the gear boxes except ZF-gear box.	X	X	X	X	X	X	√
2.18.	Replace the cardon shaft or these may be overhauled.	X	X	X	X	X	X	√
2.19.	Replace the shaft coupling and holding lock nuts & bolts on condition basis.	X	X	X	X	X	X	√
2.20.	Overhaul the driving and idle bogies. Replace the defective parts.	X	X	X	X	X	X	√
3.	HYDRAULIC							
3.1.	Check leakage in hoses, valves and joints, Rectify if required.	√	X	X	X	X	X	X
3.2.	Check hydraulic oil level in tank and do the needful.	√	X	X	X	X	X	X
3.3.	Record the maximum hydraulic temperature of the day.	√	X	X	X	X	X	X
3.4.	Check for any rubbing of hoses, loose clamping etc. and do the needful.	√	X	X	X	X	X	X
3.5.	Check all hydraulic pressures.	√	X	X	X	X	X	X
3.6.	Check all Hyd. Suction filter choking indicator.	√	X	X	X	X	X	X
3.7.	Clean hydraulic oil cooler by blowing air from opposite direction.	X	X	√	X	X	X	X
3.8.	Change suction and return line filter elements.	X	X	√**	X	X	X	X
3.9.	Change proportional filter element.	X	√*	X	X	X	X	X
3.10.	Change hydraulic oil. (Before replacement, check quality through lab test).	X	X	X	X	√	X	X
3.11.	Check leakage from all hydraulic cylinders and replace the seals on condition basis	X	X	X	X	√	X	X
3.12.	Replace damaged hoses along with clamps.	X	X	X	X	X	√	X
3.13.	Clean the hydraulic oil tank. Paint the surface of tank with approved quality of paint.	X	X	X	X	X	√	X
3.14.	Replace all the hydraulic hoses along with clamps.	X	X	X	X	X	X	√
3.15.	Check all hydraulic pumps and motors on the test bench for rated output, replace if required.	X	X	X	X	X	X	√
3.16.	Check all hydraulic cylinders change if necessary.	X	X	X	X	X	X	√
3.17.	Fill new oil after replacing all the hydraulic filters.	X	X	X	X	X	X	√
* after 250 engine hours,** after 500 engine hours								

SR.NO.	ITEM	SCH.I Daily	SCH.II 50 HRS.	SCH.III 100 HRS.	SCH.IV 200 HRS.	SCH.V 1000 HRS.	SCH.VI 2000 HRS.	SCH.VII 8000/6000 HRS.
3.18.	Clean hydraulic oil cooler.	X	X	X	X	X	X	√
3.19.	Check all the direct acting and pilot operated direction valves and change if necessary.	X	X	X	X	X	X	√
3.20.	Check all the pressure control valves and change if necessary.	X	X	X	X	X	X	√
3.21.	Check all the stop cocks and flow control valves and change if required.	X	X	X	X	X	X	√
3.22.	Flush the complete system.	X	X	X	X	X	X	√
4.	PNEUMATIC							
4.1.	Drain water separator.	√	X	X	X	X	X	X
4.2.	Drain water from air tanks.	√	X	X	X	X	X	X
4.3.	Check air-brake pressure on locking position.	√	X	X	X	X	X	X
4.4.	Check for any air leakage and do the needful.	√	X	X	X	X	X	X
4.5.	Check brake system before going into section for its effectiveness.	√	X	X	X	X	X	X
4.6.	Check all pneumatic pressures.	√	X	X	X	X	X	X
4.7.	Clean and fill air oiler with lub. oil.	X	√	X	X	X	X	X
4.8.	Lubricate both brake linkage and torque arm pivot.	X	X	√	X	X	X	X
4.9.	Check air unloader for proper functioning.	X	X	X	√	X	X	X
4.10.	Check pneumatic valves for proper functioning and change if required.	X	X	X	√	X	X	X
4.11.	Check all the pneumatic hoses and change on condition basis.	X	X	X	X	√	X	X
4.12.	Clean air tanks.	X	X	X	X	X	√	X
4.13.	Change all pneumatic valves.	X	X	X	X	X	X	√
4.14.	Check all the pneumatic cylinders and change on condition basis.	X	X	X	X	X	X	√
4.15.	Change all pneumatic hoses.	X	X	X	X	X	X	√
5.	MECHANICAL							
5.1.	Check complete machine for proper function.	√	X	X	X	X	X	X
5.2.	Check vibration frequency and adjust it if necessary	√	X	X	X	X	X	X
5.3.	Lubricate the king pin pivots of driving and idle bogies with grease.	X	√	X	X	X	X	X
5.4.	Lubricate clamp pivot pins with grease.	X	√	X	X	X	X	X

SR.NO.	ITEM	SCH.I Daily	SCH.II 50 HRS.	SCH.III 100 HRS.	SCH.IV 200 HRS.	SCH.V 1000 HRS.	SCH.VI 2000 HRS.	SCH.VII 8000/6000 HRS.
5.5.	Lubricate link rod bearings with grease.	X	√	X	X	X	X	X
5.6.	Lubricate roller clamp housing with grease.	X	√	X	X	X	X	X
5.7.	Lubricate front, middle and rear feeler roller guide bushes and guide pulleys.	X	√	X	X	X	X	X
5.8.	Check wear on brake shoes and do needful.	X	√	X	X	X	X	X
5.9.	Adjust the gap between brake shoes and wheels, if required.	X	√	X	X	X	X	X
5.10.	Check horizontal swing of the unit.	X	√	X	X	X	X	X
5.11.	Lubricate the stabilizing unit guide column.	X	√	X	X	X	X	X
5.12.	Lubricate axle gearbox flange cover with grease.	X	√	X	X	X	X	X
5.13.	Lubricate guide pulleys.	X	√	X	X	X	X	X
5.14.	Lubricate front and rear tightening trolley lifting cylinder pivot.	X	√	X	X	X	X	X
5.15.	Check working of stabilizing unit derailment protection mechanism.	X	√	X	X	X	X	X
5.16.	Lubricate the guide rod sleeve of vibration unit.	X	√	X	X	X	X	X
5.17.	Check all locking devices for proper functioning	X	√	X	X	X	X	X
5.18.	Check bolts and nuts of all hydraulic cylinders	X	√	X	X	X	X	X
5.19.	Grease sliding surfaces, guide column surface and bolts of torque supports.	X	X	X	√	X	X	X
5.20.	Check foundation bolts of brake cylinders. Tighten them if required.	X	X	X	√	X	X	X
5.21.	Grease the axle bearings of the bogies.	X	X	X	X	√	X	X
5.22.	Check function of opening and closing cylinder for roller clamps.	X	X	X	X	√	X	X
5.23.	Check function of lifting cylinders of vibration unit.	X	X	X	X	√	X	X
5.24.	Check meggy springs and replace if required.	X	X	X	X	√	X	X
5.25.	Lubricate hand brake gear with grease.	X	X	X	X	√	X	X
5.26.	Repair the defective hand tools or replace them	X	X	X	X	√	X	X
5.27.	Check condition of roller clamps and do the needful.	X	X	X	X	√	X	X
5.28.	Check wheel tyre defects and do needful	X	X	X	X	√	X	X
5.29.	Provide missing thimbles	X	X	X	X	X	√	X
5.30.	Change all the brake shoes.	X	X	X	X	X	X	√

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5.31.	Check brake cylinder bore for corrosion. If corroded, the inner bore should be chrome-plated and ground to standard size.	X	X	X	X	X	X	√
5.32.	Strengthen the machine frame where cracks have developed.	X	X	X	X	X	X	√
5.33.	Check the wheels for any tyre defects. Reprofile or change if required.	X	X	X	X	X	X	√
5.34.	Check tightness of the frame of stabilizing unit.	X	X	X	X	X	X	√
5.35.	Change stabilizing unit roller.	X	X	X	X	X	X	√
5.36.	Check stabilizing unit guide column. Change if required.	X	X	X	X	X	X	√
5.37.	Change clamp pivot pins.	X	X	X	X	X	X	√
5.38.	Change link rods with their bearings.	X	X	X	X	X	X	√
5.39.	Overhaul derailment protection mechanism.	X	X	X	X	X	X	√
5.40.	Check chassis side members, cross frames, buffer beams and welded joints etc. If damaged, it should be repaired.	X	X	X	X	X	X	√
5.41.	Check bogie side frame, springs, shock absorbers, wheel's torque supports, shackles, brakes and rod linkage. If any damage is noticed, it should be changed	X	X	X	X	X	X	√
5.42.	Overhaul the panel boxes.	X	X	X	X	X	X	√
6.	ELECTRICAL							
6.1.	Check the function of hooter & flasher light.	√	X	X	X	X	X	X
6.2.	Check all lights & horn & do needful.	√	X	X	X	X	X	X
6.3.	Check the functioning of intercom system.	√	X	X	X	X	X	X
6.4.	Change all the defective transducer fork.	X	X	√	X	X	X	X
6.5.	Check all working lights, push buttons, switches etc. and do needful.	X	X	√	X	X	X	X
6.6.	Checking of gauges and display.	X	X	X	√	X	X	X
6.7.	Replacement of Relay/Fuse if required.	X	X	X	√	X	X	X
6.8.	Replace defective lights.	X	X	X	X	√	X	X
6.9.	Inspect all electrical connections and do the needful	X	X	X	X	√	X	X
6.10.	Calibrate all input potentiometers for zero correction.	X	X	X	X	√	X	X
6.11.	Overhaul all the transducer.	X	X	X	X	√	X	X
6.12.	Change defective or missing lights.	X	X	X	X	√	X	X
6.13.	Check the wire connections in panel boxes.	X	X	X	X	√	X	X
6.14.	Calibrate the sensing trolleys.	X	X	X	X	√	X	X

SR.NO.	ITEM	SCH.I Daily	SCH.II 50 HRS.	SCH.III 100 HRS.	SCH.IV 200 HRS.	SCH.V 1000 HRS.	SCH.VI 2000 HRS.	SCH.VII 8000/6000 HRS.
6.15.	Check the limit switches and replace on condition basis	X	X	X	X	X	√	X
6.16.	Change the defective switches, potentiometer and indicator lights.	X	X	X	X	X	√	X
6.17.	Overhaul the pendulums and calibrate.	X	X	X	X	X	X	√
6.18.	Overhaul the panel boxes and provide thimbles as required.	X	X	X	X	X	X	√
6.19.	Renew the complete wiring of the machine if existing wiring found more than 40% damaged otherwise replace only the damaged circuits.	X	X	X	X	X	X	√
6.20.	Check and replace the defective LED's of solenoids if required.	X	X	X	X	X	X	√
6.21.	Replace the defective PCBs.	X	X	X	X	X	X	√
6.22.	Check the calibration of all the indicative instruments.	X	X	X	X	X	X	√
6.23.	Arrange insulation test of main cables and replace the defective ones.	X	X	X	X	X	X	√
6.24.	Check all electrical and emergency switches and do the needful	X	X	X	X	X	X	√
6.25.	Change all the defective switches and lights.	X	X	X	X	X	X	√
6.26.	Check the LED of all solenoids and replace if required.	X	X	X	X	X	X	√
6.27.	Replace all the limit switches	X	X	X	X	X	X	√
7.	UNDERFRAME							
7.1.	Under frame							
7.1.1.	Visually examine center pivot mounting bolts and attend if needed.	√	X	X	X	X	X	X
7.1.2.	Check condition of head stock/sole bar.	√	X	X	X	X	X	X
7.1.3.	Visually inspect center pivot cover.	√	X	X	X	X	X	X
7.1.4.	Visually examine and attend safety loops of bolster.	√	X	X	X	X	X	X
7.1.5.	Visually examine the shock absorbers for damages.	√	X	X	X	X	X	X
7.1.6.	Examine trough floor, turn under and other frame members from underneath for corrosion.	X	√*	X	X	X	X	X
7.1.7.	Check the wheel tread for wheel burn, flat tyre etc.	X	X	X	X	√	X	X
7.1.8.	Clean the underside of machine, however, at least once a year.	X	X	X	X	√	X	X
* to be done at every 250 engine hours.								

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7.1.9.	Lubricate the bogie pivot with grease.	x	x	x	x	√	x	x
7.2.	Brake rigging & Brake System							
7.2.1.	Visually examine brake beams breakages/damages.	√	x	x	x	x	x	x
7.2.2.	Check brake gear and adjust so that the piston stroke is within the limit.	√	x	x	x	x	x	x
7.2.3.	Check and attend brake shoe head and key & replace if necessary.	√	x	x	x	x	x	x
7.2.4.	Visually inspect brake hangers, brake gear pins and cotters/split pins and replace if necessary.	√	x	x	x	x	x	x
7.2.5.	Visually inspect damaged/missing brake gear bushes, lever hanger pins replace if necessary.	√	x	x	x	x	x	x
7.2.6.	Visually inspect for damage on brake pipe.	√	x	x	x	x	x	x
7.2.7.	Check and attend brake beam safety wire rope / safety straps.	√	x	x	x	x	x	x
7.2.8.	Examine and attend brake levers.	x	x	√	x	x	x	x
7.3.	Bogie Frame & Suspension							
7.3.1.	Visually examine the condition of bogie frame and welded locations.	√	x	x	x	x	x	x
7.3.2.	Inspect axle box safety straps/loops for damage/broken/missing.	√	x	x	x	x	x	x
7.3.3.	Examine bolster safety straps/loops for damage/broken/missing.	√	x	x	x	x	x	x
7.3.4.	Visually examine the cabin and axle support cylinders for leakages/damages.	√	x	x	x	x	x	x
7.3.5.	Visually examine the condition of suspension system (meggi spring and meggi flex washer) for any damage/loose/breakage.	x	√*	x	x	x	x	x
7.3.6.	Examine condition of the wearing plates.	x	x	√**	x	x	x	x
7.3.7.	Examine corrosion of sole bar and other under frame members with torch light or inspection lamp.	x	x	√**	x	x	x	x
7.4.	Draw Gear							
7.4.1.	Check and replace damage/missing split pins.	√	x	x	x	x	x	x
*to be done at 250 hrs ** to be done at 500 hrs								

SR.NO.	ITEM	SCH.I Daily	SCH.II 50 HRS.	SCH.III 100 HRS.	SCH.IV 200 HRS.	SCH.V 1000 HRS.	SCH.VI 2000 HRS.	SCH.VII 8000/6000 HRS.
7.4.2.	Examine draw hook, draw bars, rubber pads for damages.	√	x	x	x	x	x	x
7.4.3.	Examine visually draft key locking pins.	√	x	x	x	x	x	x
7.4.4.	Check condition of the screw coupling and its components and replace is required	√	x	x	x	x	x	x
7.4.5.	Check condition of draw beam and locating pins on it.	√	x	x	x	x	x	x
7.4.6.	Ensure that wear on screw coupling shackle pins, trunion pins, shackle/link holes and draw hook holes should not exceed 3 mm.	x	x	√**	x	x	x	x
7.4.7.	Ensure that wear at any section on draw hook should not exceed 10 mm.	x	x	√**	x	x	x	x
7.5.	Buffing Gear							
7.5.1.	Visually examine buffer plungers for damages/drooping/stroke length.	√	x	x	x	x	x	x
7.5.2.	Examine buffer mounting bolts and attend if necessary.	√	x	x	x	x	x	x
7.5.3.	Examine visually buffer casing for cracks/damages	√	x	x	x	x	x	x
7.5.4.	Ensure the length is within 584-635 mm.	x	x	√**	x	x	x	x
7.5.5.	Inspect buffer plunger false plate for wear and profile.	x	x	√**	x	x	x	x
7.6.	Running Gear and Wheels							
7.6.1.	Examine visually axle box for grease oozing out, warm box if any	√	x	x	x	x	x	x
7.6.2.	Visually examine wheel tyre profile and thickness of tyre and check with tyre profile gauge if they appear to be near condemning limit	√	x	x	x	x	x	x
7.6.3.	Visually inspect axle box covers.	√	x	x	x	x	x	x
7.6.4.	Inspect wheel tread for shattered rim, spread rim, shelled tread, thermal cracks, heat checks	√	x	x	x	x	x	x
7.6.5.	Check with wheel distance gauge for loose or tight wheels.	x	x	√**	x	x	x	x
7.6.6.	Check the wheels for any tyre defects. Re-profile or change if required.	x	x	x	x	x	x	√
7.6.7.	Check the axle bearing and grease them. Change, if required.	x	x	x	x	x	x	√
7.6.8.	Change mounting pads of all gearboxes.	x	x	x	x	x	x	√
7.6.9.	Overhaul all the gearboxes.	x	x	x	x	x	x	√
*to be done at 250 hrs**to be done at 500 hrs								

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8.	GENERAL							
8.1.	Check for any unusual sound from any section of machine.	√	X	X	X	X	X	X
8.2.	Check all the functions of machine before block working.	√	X	X	X	X	X	X
8.3.	Ensure proper functioning of parking brakes.	√	X	X	X	X	X	X
8.4.	Clean complete machine.	√	X	X	X	X	X	X
8.5.	Thoroughly clean all the panel boxes with pressurized air.	X	X	X	√	X	X	X
8.6.	Check for safety items as per annexure-I	X	X	X	√	X	X	X
8.7.	Calibrate the machine on track for all functions.	X	X	X	X	√	X	X
8.8.	Visual and Physical inspection of wheel & axles shall be done at a frequency of once in a year or after every 1000 running hours whichever is earlier.	X	X	X	X	√	X	X
8.9.	Ultrasonic testing of axles of machine shall be done between 40,000 to 45,000 kms of running or three years, whichever is earlier.	X	X	X	X	X	√	X
8.10.	Check the function of all assemblies after maintenance.	X	X	X	X	X	√	X
8.11.	Test the machine for one week near the workshop before it is put for normal working in section on regular basis	X	X	X	X	X	√	X
8.12.	Attend complete painting of the machine.	X	X	X	X	X	X	√
Note-During CPOH, Machine Supervisor and CPOH Inspecting Authority jointly inspect the Machine. Any part of Machine is to be repaired or replaced; this decision is taken by CPOH Inspecting authority.								

Annexure-I

List of Safety Equipments

S.No.	Description	Quantity	Available Yes (√) / No (x)
1.	Detonators in a tin case	1 box	
2.	H.S. flag red	2 nos.	
3.	H.S. flag green	1 nos.	
4.	H.S. Tri color Lamps/LED torch	2 nos.	
5.	Chain & Padlock	1 set	
6.	Switch Clamp with Padlock	2 nos.	
7.	25 t jack* with traverser	2 no.	
8.	Crow bars	4nos.	
9.	Wooden blocks of different sizes	8nos.	
10.	Rail thermometer (dial type)	1 no.	
11.	Banner flags	2 nos.	
12.	Walky talky with same frequency of SM,guard and loco pilots	2 nos.	
13.	Portable telephone	1 no.	
14.	First Aid kit	1 no	
15.	Skids	4 nos.	
16.	Working time table of section where machine working	1 copy	
17.	G&SR book with up to date amendment slips	1 copy	
18.	4 cell flasher light/ LED torch,6watt() (rechargeable)	1 no.	
19.	Safety helmets	For each Machine staff	
20.	Protective clothing, safety shoes and safety gloves	For each Machine staff	
21.	High visibility warning clothes	For each Machine staff	
22.	Track Machine Manual with up to date correction slip	1 no.	
23.	Accident Manual	1 no.	
24.	Fire extinguisher	2 nos.	
25.	Hooter (Manually/ Remote)	2 nos.	
26.	Hydraulic Hand Pump	1 no.	
27.	Tail Lamp	1 no.	
28.	Emergency pneumatic/Hydraulic hose off sizes (complete with end fittings)	1 no.	

Note:

- I Inspecting official should wear the safety items 19 to 21 while doing the inspection.
- II All the working units should be properly locked and a tag should be attached to the unit showing the name of person who has locked the unit.
- III Proposal is sent to Railway board vide letter no. TM/HM/1, VOL-2, dt. 22/08/2019 for approval of jack machine wise.

**PRECAUTIONS WHILE WORKING WITH DYNAMIC TRACK
STABILISER (DGS-62N)**

1. For bridges up to 4 m span with ballasted deck, no restriction is required during stabilising operation with respect to vibration speed and preload values.
2. For bridges with 4-12 m span with ballasted deck, adjustment should be done for a reduced preload (40 bar) and increased frequency (up to 35 Hz).
3. Bridges with span over 12 m with ballasted deck must not be stabilised without permission of the competent authority.
4. Tunnels should not be stabilised.
5. Bridges requiring speed restriction on account of their condition should also be stabilised with reduced adjustments as mentioned in sl. no.2 above (maximum frequency and reduced preload).
6. For structures close to the stabilized track like abutments, casings, retaining walls, edges of platforms etc., no restriction is required if they are in good condition. Otherwise the adjustments should be done for reduced preload and increased frequency as in sl.no.2.
7. For high structures which are at a distance of 5 m and above from the outer rail of the stabilized track, no restrictions are required. For distance less than 5 m, the reduced adjustments are required from 10 m before to 10 m after the length of structure along the track.
8. Stabilizing work neither should be started nor to be ended in transition portion of the curve.

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Railways:

1. S/Sri Jitendra Kumar Sharma JE/TMC/NR

RDSO:

1. S/Sri Muslim Ahmad SSE/TM
2. " " V.P. Srivastava SSE/TM
3. " " A.K.Srivastava SSE/TM
4. " " D.G.Sharma SSE/TM

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